

Amendment Under 37 C.F.R. § 1.116  
USSN 10/782,841  
Attorney Docket Q79558  
July 29, 2005

### **REMARKS**

Claims 8-12 and 14 are all the claims pending in the application.

In the last Office Action Figures 21 and 22 were objected to since they did not have the legend "Prior Art" associated with each figure. The Examiner's attention is directed to the Preliminary Amendment filed February 23, 2004 wherein two sheets of replacement drawings containing Figures 1, 2, 21 and 22 were submitted. Figures 21 and 22 each were provided with the legend "Prior Art". Therefore, it is respectfully requested that the objection to the drawings be withdrawn.

In the Final Rejection the drawings were further objected to on the grounds that the drawings must show every feature of the invention specified in the claims. More specifically, the Examiner stated that the two cylindrical yolks as claimed in Claim 13 must be shown or the feature cancelled from the claim. Claim 13 was also objected to since it did depended from Claim 2 which had been cancelled in the last response. Since Claim 13 has been cancelled the objection to the drawings with respect to Claim 13 and the dependency of Claim 13 are moot questions.

In the Final Rejection Claims 8-14 inclusive were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' admitted prior art (AAPA) in view of Yokotani *et al.* (6,107,793). Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

The present invention as set forth in amended Claim 8 is directed to an angle sensor comprising a rotatable cylindrical magnet having a first semi-circular portion magnetized as a North pole and a second semi-circular portion magnetized as a South pole. A magnetoelectric conversion element is fixedly mounted within the rotatable cylindrical magnet and a correction part is provided on an outer circumferential surface of the cylindrical magnet to correct axial magnetic flux density distribution. The dependent claims are specific to the correction part being an annular groove formed in a circumferential magnet. The cross-sectional shape of the annular groove may be rectangular semi-circular or V-shaped. The subject matter of the claims is best seen in Figures 11-16.

In the Final Rejection Claims 8-14 inclusive were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' admitted prior art (AAPA) in view of Yokotani *et al.* (6,107,793). The Examiner admitted that the AAPA fails to disclose a correction part on an outer circumferential surface of the cylindrical magnet to correct axial magnetic flux density distribution.

The patent to Yokotani *et al.* discloses at the surface of the magnet 20 facing the magnetic field detecting element 3 is curved and the magnet 20A has a surface slanted into triangular-shaped plane at its end facing the magnetic field sensing plane of the magnetic field detecting element 3 (see column 7, lines 45-50). The Examiner stated that Yokotani *et al.* discloses a magnetic sensing device and the provision of a correction part (20A groove as in Claim 9) on an outer circumferential surface of the magnet to correct axial magnetic flux density distribution. However, it is apparent from Figures 1A and 1B that the magnet 20 is not

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cylindrical and therefore does not have an outer circumferential surface. Therefore, Yokotani *et al.* could not possibly teach the provision of a correction part on the outer circumferential surface of the magnet. In addition, Yokotani *et al.* teaches that the slanted surface of the magnet faces the magnetic field detecting element 3. The detecting element 3 may correspond to the Hall element 55 in the AAPA because the Hall element 55 is a detecting element that detects the change in the relative position between the Hall element 55 and the cylindrical magnet 54. However, there is absolutely no disclosure whatsoever in Yokotani *et al.* of a magnet having a correction part in the form of an annular groove formed on the circumferential surface of the cylindrical magnet. Accordingly, there is no support whatsoever within the teachings of Yokotani *et al.* which would support the combination of Yokotani *et al.* with the admitted prior art to meet the claims of the present application. Therefore, it is respectfully requested that Claims 8-12 and 14 be allowed and the application passed to issue forthwith.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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